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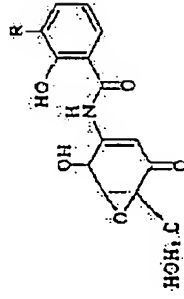
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(54) ANTIBIOTIC SUBSTANCE EPOXYQUINOMICIN C AND D, ITS PRODUCTION AND ANTIRHEUMATIC AGENT

(57)Abstract:  
PROBLEM TO BE SOLVED: To obtain a new compound having a new molecular skeleton and exhibiting antirheumatic activity.

SOLUTION: The antibiotic substances epoxyquinomicin C and D are expressed by the formula (R is H for epoxyquinomicin C and C1 for epoxyquinomicin D). The epoxyquinomicin C has the following physical and chemical properties: appearance and nature, white powder having weakly acidic nature; melting point, 168-172° C (decomposition); specific rotation,  $[\alpha]_{D^{25}} = +128^{\circ}$  (c=1.0, methanol); etc. The compound of the formula can be produced by culturing a microbial strain capable of producing epoxyquinomicin C and D such as Amycolatopsis sp. MK299-95F4 in a nutrient medium at pH6.5-7.5 under aerobic condition.



## LEGAL STATUS

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quinomycin A, and showing a hydrogen atom by epoxy kino mycin B among a formula), and which is a compound and epoxy kino mycin B, or these salts as an active principle.

[Translation done.]

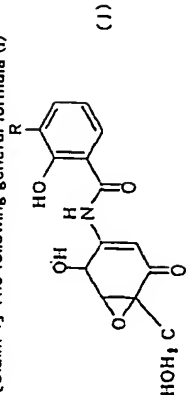
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#### CLAIMS

[Claim(s)]

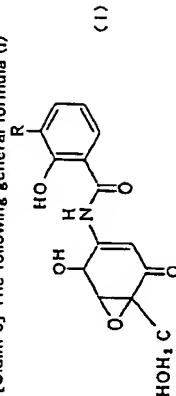
[Claim 1] The following general formula (I)



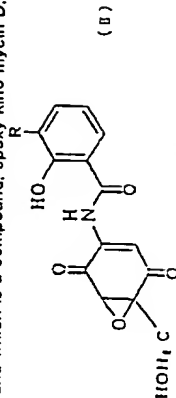
They are the antibiotic epoxy kino mycin C which is expressed with (R showing a hydrogen atom by epoxy kino mycin C, and showing a chlorine atom by epoxy kino mycin D among a formula) and which is a compound and epoxy kino mycin D, or those salts.

[Claim 2] the manufacturing method of the antibiotic epoxy kino mycin C which cultivates the production bacillus of the epoxy kino mycin C and D according to claim 1 belonging to the mycelotopsis group to a nutrition culture medium, and is characterized by extracting epoxy kino mycin C and (or) D from the culture, and (or) epoxy kino mycin D.

[Claim 3] The following general formula (I)



They are the antibiotic epoxy kino mycin C which is expressed with (R showing a hydrogen atom by epoxy kino mycin C, and showing a chlorine atom by epoxy kino mycin D among a formula) and which is a compound, epoxy kino mycin D, and the following general formula (II).



It is the rheumatism agent characterized by containing at least one compound chosen from the antibiotic epoxy quinomycin A which is expressed with (R showing a chlorine atom by epoxy

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